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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,899	10/30/2003	Steven Francis Best	AUS920030792US1	9243
35525	7590	07/08/2008		
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER HO, BINH VAN	
			ART UNIT 2163	PAPER NUMBER
			NOTIFICATION DATE 07/08/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptonotifs@yeciipaw.com

### Office Action Summary

**Application No.**

10/697,899

**Applicant(s)**

BEST ET AL.

**Examiner**

BINH V. HO

**Art Unit**

2163

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 10/16/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

### DETAILED ACTION

1. This is a response to amendment filed 03/27/2008.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 16-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 16 recites "recordable-type medium" which is not limited to tangible embodiments. In view of Applicant's disclosure, specification paragraph [0054] (...transmission-type media, such as digital and analog communications links, wired or wireless communications links using transmission forms, such as, for example, **radio frequency and light wave transmissions...**"), the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., floppy disc, etc.) and intangible embodiments (e.g., radio frequency and light wave transmissions). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

Claims 17-22 are rejected because they either contain or inherit the deficiencies of claim 16.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 5-11, 13-18, and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Carter (U.S. 5,909,540).

(Claims 1, 8-9, and 16)

Carter discloses 1, 3-5, and 7-13, a method in a data processing system for storing data in a file system, the method comprising determining whether space is available in an inode for a file in the file system ("determine the free volume space available for allocation, the file system 60 requests the total available space information", col. 12, lines 50-55); and responsive to space being available, storing the data in the inode ("If the total available space is less than the required allocation size, the request is denied immediately. Otherwise, the file system 60 will proceed to allocate the pages to satisfy the request. The fact that the file system 60 can proceed with the allocation does not guarantee that the allocation will succeed, because the actual total available space may change constantly", col. 12, lines 55-61).

(Claims 2, 10, and 17)

Carter discloses to determining whether additional data being present; and responsive to the additional data being present, storing the additional data in a partially

filled block of another file ("a partially written state, and the file system 60 instances utilize the shared address space both as data storage and as mechanism for information passing", col. 15, lines 53-56).

(Claims 3, 11, and 18)

Carter discloses to responsive to spacing being unavailable ("If the total available space is less than the required allocation size, the request is denied immediately", col. 12, lines 55-57), storing the additional data in a partially filled block of another file ("a partially written state, and the file system 60 instances utilize the shared address space both as data storage and as mechanism for information passing", col. 15, lines 53-56).

(Claims 5,13, and 20)

Carter discloses in figures 5-10, wherein the space being located in an extension area in the inode ("usually as a result of a file extension requested by writing beyond the data stream allocation size", col. 12, lines 13-34).

(Claims 6,14, and 21)

Carter discloses further comprising determining whether a file size for the data being divisible by a block size for blocks in the file system; and if the file size is divisible by the block size, storing the data in a block "a page is the atomic unit in the addressable shared memory space 20, and it contains up to 4 kilobytes of data. Even if the entire 4 kbytes is not needed, an entire page is used. This is illustrated by the page

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108 that only contains about 2 kbytes of data. The files used by the file system 60 are described in greater detail below under the heading "Files.", col. 9, lines 44-49; col. 11, lines 29-40).

(Claims 7, 15, and 22)

Carter discloses further comprising determining whether space being available in the inode to store the data; and responsive to room being unavailable in the inode ("If the total available space is less than the required allocation size, the request is denied immediately", col. 12, lines 55-57), storing the data in a partially filled block of another file ("a partially written state, and the file system 60 instances utilize the shared address space both as data storage and as mechanism for information passing", col. 15, lines 53-56).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4,12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter (U.S. 5,909,540) in view of Bixby (U.S. 2005/0065986).

(Claims 4,12, and 19)

Carter discloses substantially all of the elements, except a last block of the another file. Bixby teaches created sparse by writing only to the inode and last block of the file. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the sparse file allows the production file to use only those blocks that the client writes data to. This allows less disk blocks to be consumed initially (paragraph [0152]).

### **Inquiry**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh V. Ho whose telephone number is 571 272 8583. The examiner can normally be reached on M-F from 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on 571 272 1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hung T Vy/  
Primary Examiner, Art Unit 2163

Binh V Ho  
Examiner  
Art Unit 2163